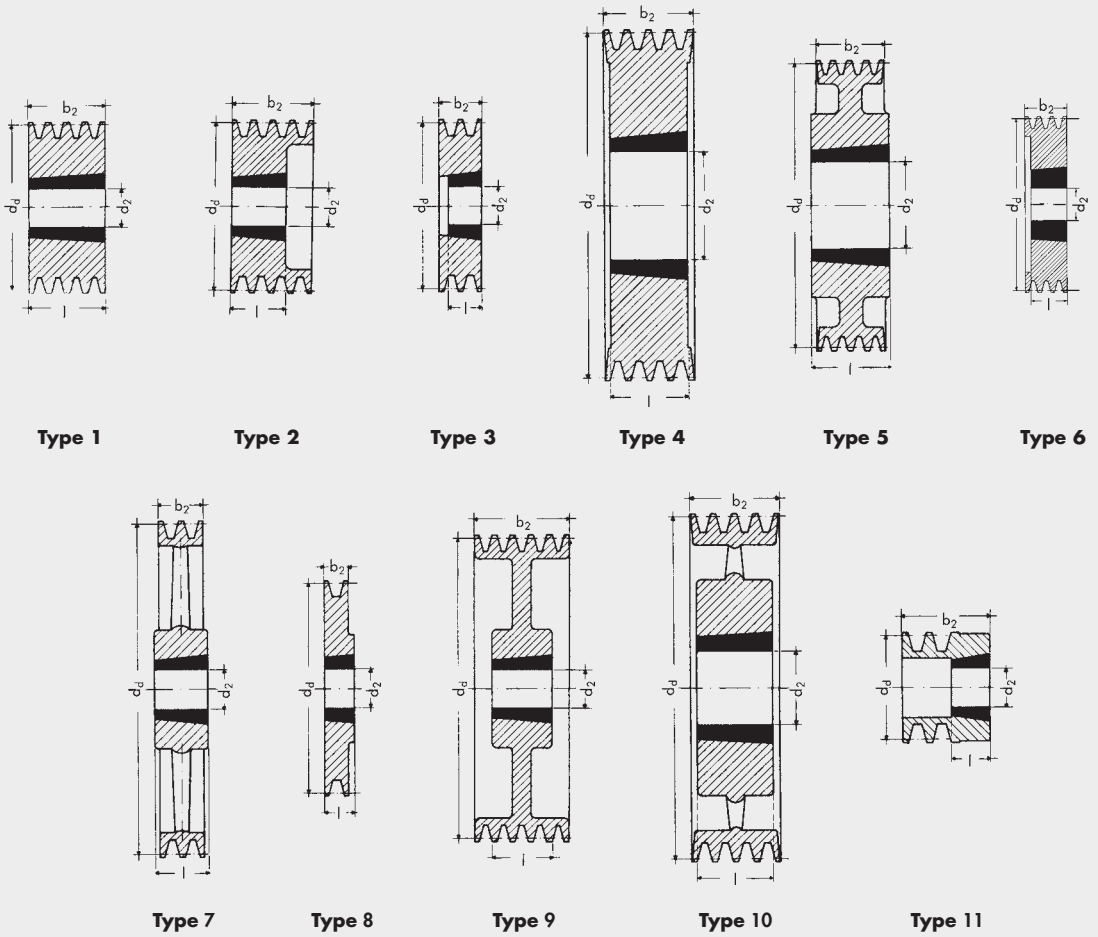
PRODUCT DESCRIPTION

optibelt KS V-GROOVED PULLEYS – optibelt TB TAPER-BUSHES

optibelt KS V-grooved pulleys
optibelt KS V-grooved pulleys are available with pilot bore and for taper bushes in all common belt profiles.

optibelt TB taper bushes
optibelt TB taper bushes are used for easy installations of pulleys on shafts with or without keyway.

PRODUCT DESCRIPTION
optibelt KS V-GROOVED PULLEYS, TYPES



Type 1 Type 2 Type 3 Type 4 Type 5 Type 6

Type 7 Type 8 Type 9 Type 10 Type 11

We reserve the right to technical modifications.

Balancing

V-grooved pulleys are statically balanced in accordance with the guidelines in VDI 2060, as standard:
Quality level G 16; for dia. $d_d \leq 400$ mm at n =1500 rpm; for dia. $d_d > 400$ mm at v = 30 m/s.
The pulleys are balanced without keys on smooth balancing spindles. Machines whose runners are balanced with a keyway in the shaft end should be ordered as follows: "Balanced with pilot bore and empty keyway on smooth balancing spindles without key".

Balancing in one plane to quality level G 6.3 on request. We recommend balancing in two planes according to quality level G 6.3, or finer when v > 30 m/s or the ratio of datum diameter to face width $d_d : b_2$ is < 4 at v > 20 m/s. In such cases, the operational speed of the pulley must be given.

Special pulleys and customised pulleys on request

PRODUCT DESCRIPTION
optibelt KS V-GROOVED PULLEYS, STANDARDS – DESIGN CRITERIA – TYPES

Solid pulley

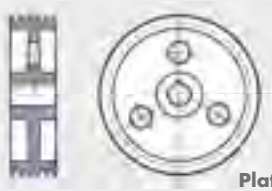
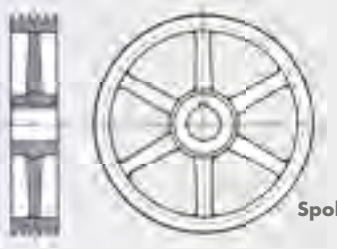


Plate pulley



Spoked pulley

An essential component in V-belt drive systems is the V-belt pulley, or in short V-pulley. They are primarily manufactured from cast iron EN-GJL-200-DIN EN 1561 and are available with a pilot hole, pre-fabricated hole or with a clamping bush system. The DIN standard as well as the most important national pulley standards of all industrial nations are based upon the ISO 4183 standard "Grooved Pulleys for Classic V-Belts and Wedge Belts".
V-belt pulleys with grooves for wedge belts according to DIN 7753 Part 1 are also suitable for classic V-belts with the same datum width b_d according to DIN 2215. These are known as dual duty pulleys.

Example

	Belt		Grooved pulleys
Profile	SPZ	Z/10	SPZ – Z/10
Top width	$b_o \approx 9.7$	$b_o \approx 10$	$b_1 \approx 9.7$
Datum width	$b_d = 8.5$		$b_d = 8.5$
Belt height/ groove depth	$h \approx 8$	$h \approx 6$	$t_{min} = 11$

When selecting a pulley, the following criteria should be taken into account:

- Use standard pulley diameters.
  If design considerations make this impossible, a standard diameter should, as a minimum requirement, be selected for the largest pulley in the drive.
- Do not select a pulley smaller than the recommended size to ensure a longer operational life and overall drive efficiency.
- If manufacturing your own pulleys, the overall shape and processing must conform to the relevant standards.
- Grooved pulleys are generally balanced in one plane (statically) to quality level Q 16 as in VDI 2060.
- Balancing in two planes (dynamically), quality level Q 6.3 becomes necessary if:
  1. $v > 30$ m/s or
  2. the ratio of datum diameter to pulley face width $d_d : b_2 < 4$ at $v > 20$ m/s.

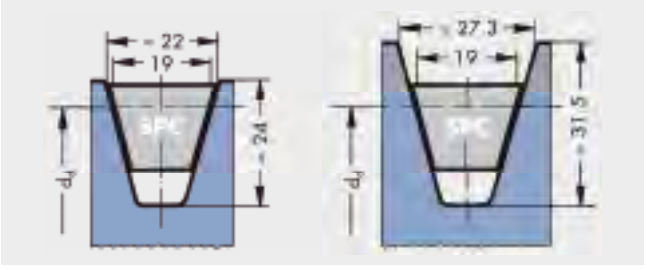
Note: The timely replacement of pulleys damaged by corrosion or erosion prevents premature failure of the belts. Furthermore, it is important to prevent the belt basis from direct contact with the groove basis as this can quickly lead to damage and premature failure (exception: special drives such as V-flat drives).

Deep grooved pulleys

Deep grooved pulleys are employed for special drive situations such as
- the use of guide idlers,
- twist drives or
- drives subject to severe vibration.

The increased groove top width "b_1" and depth "t" of deep grooved pulleys improves the running characteristics of the belt, particularly when entering the groove. Turning over and running out of the belt are prevented.

Deep grooved pulleys are not suitable for the use with kraftbands.



STANDARD RANGE

optibelt KS V-GROOVED PULLEYS DIN 2211 SHEET 1 FOR WEDGE BELTS AND DIN 2217 SHEET 1 FOR CLASSIC V-BELTS

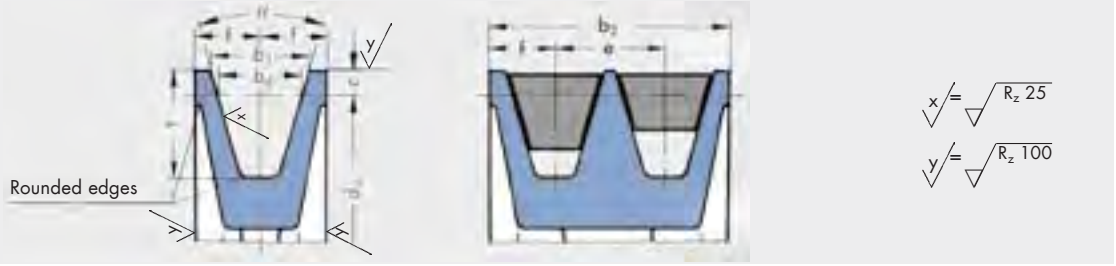


Table 14

V-belt profile	ISO designation	–	Y*	–	Z*	A*	B*	–	C*	–	D	E
	DIN 2215	5	6	8	10	13	17	20	22	25	32	40
Wedge belt profile	DIN 7753 Part 1 and ISO	–	–	–	SPZ*	SPA*	SPB*	–	SPC*	–	–	–
b_d		4.2	5.3	6.7	8.5	11.0	14.0	17.0	19.0	21.0	27.0	32.0
$b_1 \approx$		5.0	6.3	8.0	9.7	12.7	16.3	20.0	22.0	25.0	32.0	40.0
c		1.3	1.6	2.0	2.0	2.8	3.5	5.1	4.8	6.3	8.1	12.0
e		6 ± 0.3	8 ± 0.3	10 ± 0.3	12 ± 0.3	15 ± 0.3	19 ± 0.4	23 ± 0.4	25.5 ± 0.5	29 ± 0.5	37 ± 0.6	44.5 ± 0.7
f		5 ± 0.5	6 ± 0.5	7 ± 0.6	8 ± 0.6	10 ± 0.6	12.5 ± 0.8	15 ± 0.8	17 ± 1.0	19 ± 1.0	24 ± 2.0	29 ± 2.0
t Endless V-belts		6 + 0.6 0	7 + 0.6 0	9 + 0.6 0	11 + 0.6 0	14 + 0.6 0	18 + 0.6 0	18 + 0.6 0	24 + 0.6 0	22 + 0.6 0	28 + 0.6 0	33 + 0.6 0
t Open-ended V-belts DIN 2216								21 + 0.6 0		26 + 0.6 0	33 + 0.6 0	38 + 0.6 0
$d_{d\ min}$ V-belts		20	28	40	50	71	112	160	180	250	355	500
$d_{d\ min}$ Wedge belts		–	–	–	63	90	140	–	224	–	–	–
α		32° ± 1° $d_d \le 50$	32° ± 1° $d_d \le 63$	32° ± 1° $d_d \le 75$	–	–	–	–	–	–	–	–
		–	–	–	34° ± 1° $d_d \le 80$	34° ± 1° $d_d \le 118$	34° ± 1° $d_d \le 190$	34° ± 1° $d_d \le 250$	34° ± 1° $d_d \le 315$	34° ± 1° $d_d \le 355$	–	–
		36° ± 1° $d_d > 50$	36° ± 1° $d_d > 63$	36° ± 1° $d_d > 75$	–	–	–	–	–	–	36° ± 30′ $d_d \le 500$	36° ± 30′ $d_d \le 630$
		–	–	–	38° ± 1° $d_d > 80$	38° ± 1° $d_d > 118$	38° ± 1° $d_d > 190$	38° ± 1° $d_d > 250$	38° ± 30′ $d_d > 315$	38° ± 30′ $d_d > 355$	38° ± 30′ $d_d > 500$	38° ± 30′ $d_d > 630$
Face width b_2 for number of grooves z $b_2 = (z - 1)\ e + 2\ f$	**1**	10.0	12.0	14.0	16.0	20.0	25.0	30.0	34.0	38.0	48.0	58.0
	2	16.0	20.0	24.0	28.0	35.0	44.0	53.0	59.5	67.0	85.0	102.5
	3	22.0	28.0	34.0	40.0	50.0	63.0	76.0	85.0	96.0	122.0	147.0
	4	28.0	36.0	44.0	52.0	65.0	82.0	99.0	110.5	125.0	159.0	191.5
	5	34.0	44.0	54.0	64.0	80.0	101.0	122.0	136.0	154.0	196.0	236.0
	6	40.0	52.0	64.0	76.0	95.0	120.0	145.0	161.5	183.0	233.0	280.5
	7		60.0	74.0	88.0	110.0	139.0	168.0	187.0	212.0	270.0	325.0
	8			84.0	100.0	125.0	158.0	191.0	212.5	241.0	307.0	369.5
	9				112.0	140.0	177.0	214.0	238.0	270.0	344.0	414.0
	10					155.0	196.0	237.0	263.5	299.0	381.0	458.5
	11						215.0	260.0	289.0	328.0	418.0	503.0
	12							283.0	314.5	357.0	455.0	547.5

(values in mm)

* These V-grooved pulleys are also suitable for optibelt SUPER TX M=S V-belts, optibelt SUPER E-POWER M=S and optibelt SUPER X-POWER M=S.

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS DIN 2211 SHEET 1 FOR WEDGE BELTS AND DIN 2217 SHEET 1 FOR CLASSIC V-BELTS

Table 15

V-belt profile	ISO designation	–	Y	–	Z	A	B	–	C	–	D	E	Datum diameter d_d		Radial and axial run-out tolerance
	DIN 2215	5	6	8	10	13	17	20	22	25	32	40			
Wedge belt profile	DIN 7753 Part 1 and ISO 4184	–	–	–	SPZ	SPA	SPB	–	SPC	–	–	–	min.	max.	
Datum diameter d_d		20.0 22.0 25.0 28.0 31.5 35.5 40.0	28.0 31.5 35.5 40.0	40	40■•								20.0 22.0 25.0 28.0 31.5 35.5 40.0	20.4 22.4 25.4 28.4 32.0 36.1 40.6	0.2
		45.0 50.0 56.0 63.0	45.0 50.0 56.0 63.0	45 50 56 63	**45**■• **50**■• **56**■• **63** **67**	**63**■• **67**■•							45.0 50.0 56.0 63.0 67.0	45.7 50.8 56.9 64.0 68.0	
		71.0 80.0	71.0 80.0 90.0 100.0	71 80 90 100	**71**■• **75**■• **80**■• **85**■• **90** **95** **100** **106**	**71**■• **75**■• **80**■• **85**■• **90** **95** **100** **106**	**90**■• **95**■• **100**■• **106**■•						71.0 75.0 80.0 85.0 90.0 95.0 100.0 106.0	72.1 76.1 81.3 86.3 91.4 96.4 101.6 107.6	
			112.0 125.0	112 125 140 160	**112** **118** **125** **132** **140** **150** **160**	**112** **118** **125** **132** **140** **150** **160**	**112**■• **118**■• **125**■• **132**■• **140** **150**	160	140• 150• 160•				112.0 118.0 125.0 132.0 140.0 150.0 160.0	113.8 119.9 127.0 134.1 142.2 152.4 162.6	0.3
				180 200	**170** **180** **190** **200** **212** **224** **250**	**170** **180** **190** **200** **212** **224** **225** **236** **250**	**170** **180** **190** **200** **212** **224** **225** **236** **250** **265**	180 200 224 250	**180**■• 190■• **200**■• **212**■• **224** **225** **236** **250** **265**	250			170.0 180.0 190.0 200.0 212.0 224.0 225.0 236.0 250.0 265.0	172.7 182.9 193.0 203.2 215.4 227.6 228.6 239.8 254.0 269.0	0.4
					280 **300** **315** **355** **400**	**280** **300** **315** **355** **400**	**280** **300** **315** **335** **355** **375** **400** **425**	280 315 355 400	**280** **300** **315** **335** **355** **375** **400** **425**	280 315 355 400	355 400		280.0 300.0 315.0 335.0 355.0 375.0 400.0 425.0	284.5 304.8 320.0 340.0 360.7 380.7 406.4 431.4	0.5
					450 **500** **560** **630**	**450** **500** **560** **630**	**450** **500** **560** **630**	450 500 560 630	**450** **475** **500** **560** **630**	450 500 560 630	450 500 560 630	500 560	450.0 475.0 500.0 560.0 630.0	457.2 482.2 508.0 569.0 640.1	0.6
					710	710 800 900 1000	**710** **800** **900** **1000**	710 800 900 1000	**710** **800** 900 **1000**	710 800 900 1000	710 800 900 1000	710 800 900 1000	710.0 800.0 900.0 1000.0	721.4 812.8 914.4 1016.0	0.8
								1120 1250 1400 1600	1120 **1250** 1400 1600	1120 1250 1400 1600	1120 1250 1400 1600	1120 1250 1400 1600	1120.0 1250.0 1400.0 1600.0	1137.9 1270.0 1422.4 1625.6	1.0
								1800 2000	1800 2000	1800 2000	1800 2000	1800 2000	1800.0 2000.0	1828.8 2032.0	1.2
Allowed deviation of the datum diameters of the grooves in relation to one another [mm]		0.3			0.4			0.6					–		

For further details see standard DIN 2211 Page 1 and DIN 2217 Page 1. These V-grooved pulleys are also suitable for optibelt SUPER TX and optibelt SUPER X-POWER M=S V-belts. Preferred datum diameters in **bold** type. ■ Only for classic V-belts, raw edge • For optibelt SUPER X-POWER M=S wedge belts

STANDARD RANGE
optibelt KS V-GROOVED PULLEYS
ARPM/MPTA FOR WEDGE BELTS

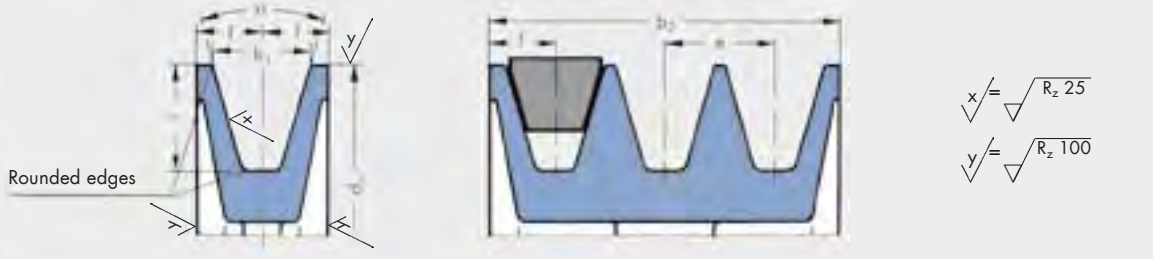


Table 16

Belt profile ARPM/MPTA		3V/9N	5V/15N	8V/25N
b_1		8.89 ± 0.13	15.24 ± 0.13	25.40 ± 0.13
e		10.30 ± 0.40	17.50 ± 0.40	28.60 ± 0.40
f		9.00 $^{+\ 2.00}_{-\ 1.00}$	13.00 $^{+\ 3.00}_{-\ 1.00}$	19.00 $^{+\ 6.00}_{-\ 2.00}$
t_{min}		8.6	15.0	25.1
$d_{a\ min}$		67	151	315
α		36° ± 25′ d_a 63 to 90	— —	— —
		38° ± 25′ d_a > 90 to 150	38° ± 25′ d_a 140 to 255	38° ± 25′ 315 to 405
		40° ± 25′ d_a > 150 to 305	40° ± 25′ d_a > 255 to 405	40° ± 25′ d_a > 405 to 570
		42° ± 25′ d_a > 305	42° ± 25′ d_a > 405	42° ± 25 d_a > 570
Face width b_2 for number of grooves z: $b_2 = (z - 1)\ e + 2\ f$	**1**	18.0	26.0	38.0
	2	28.3	43.5	66.6
	3	38.6	61.0	95.2
	4	48.9	78.5	123.8
	5	59.2	96.0	152.4
	6	69.5	113.5	181.0
	7	79.8	131.0	209.6
	8	90.1	148.5	238.2
	9	100.4	166.0	266.8
	10	110.7	183.5	295.4
	11	121.0	201.0	324.0
	12	131.3	218.5	352.6
			(values in mm)	

For drives with several grooves the total of all deviations from the nominal value e for all groove distances of a pulley ± 0.8 mm must not be exceeded. For further details see ARPM/MPTA.

Note
The allowed variations of V-grooved pulleys according to ARPM/MPTA deviate only slightly from the values contained in ISO 5290 "Grooved pulleys for joint narrow V-belts (Kraftbands)". Therefore, optibelt KB kraftbands can be used in V-grooved pulleys manufactured according to both standards. These V-grooved pulleys are also suitable for optibelt SUPER X-POWER M=S V-belts.

STANDARD RANGE
optibelt KS V-GROOVED PULLEYS FOR KRAFTBANDS

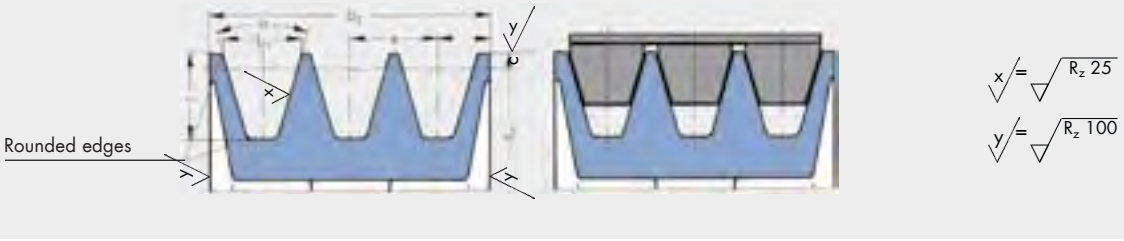


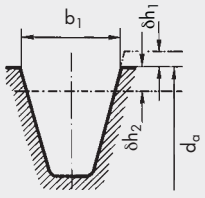
Table 17: V-grooved pulleys for kraftbands with wedge belts ISO 5290

Profile	d_a	$\alpha°$ ± 30′	b_1 ≈	δh_{1max}	δh_{2max}	t_{min}	e	Tol e[1]	Σ Tol e[2]	f_{min}	$d_{a\ min}$
3V/9J	67 to 90 > 90 to 150 > 150 to 300 > 300	36 38 40 42	8.9	0.20	0.30	8.9	10.3	± 0.25	± 0.5	9	84 (3VX) 63
5V/15J	180 to 250 > 250 to 400 > 400	38 40 42	15.2	0.25	0.40	15.2	17.5	± 0.25	± 0.5	13	191 (5VX) 140
8V/25J	315 to 400 > 400 to 560 > 560	38 40 42	25.4	0.30	0.50	25.4	28.6	± 0.40	± 0.8	19	355

For further details please see standard ISO 5290.
1) Tolerance for the centre distance "e" of two adjacent grooves.
2) The sum of all deviations from the nominal dimension "e" for all groove distances of a pulley must not exceed the given tolerance.

The international standard ISO 5290 specifies pulley groove dimensions for belt profiles 3V/9J, 5V/15J, 8V/25J.
The groove top width "b_1" is used as the basic reference dimension for standardisation of the grooves and joint V-belts. The pulley groove and joint V-belts are considered as a single unit in the standard ISO 5290.
The values δh_1 and δh_2 were chosen to ensure that

1. the top cover of the joint belt has no contact with the outside pulley diameter, in order to prevent the separation of the top cover.
2. the ribs are nevertheless still deep enough inside the pulley in order to ensure an optimum power transmission.



b_1 = effective width
d_a = effective outside diameter

The groove faces must be straight at least to a level of $d_a - 2\ \delta h_2$.

Table 18: V-grooved pulleys for kraftbands with wedge belts profiles SPZ, SPA, SPB and SPC according to DIN 2211/ ISO 4183

Profile	d_d	$\alpha°$ ± 30′	b_1 ≈	c	t_{min}	e	Tol e[1]	Σ Tol e[2]	f_{min}	$d_{d\ min}$
SPZ	71 to 80 > 80	34 38	9.7	2.0	11	12.0	± 0.3	± 0.6	8.0	80
SPA	100 to 118 > 118	34 38	12.7	2.8	14	15.0	± 0.3	± 0.6	10.0	112 (XPA) 90
SPB	160 to 190 > 190	34 38	16.3	3.5	18	19.0	± 0.4	± 0.8	12.5	180 (XPB) 140
SPC	250 to 315 > 315	34 38	22.0	4.8	24	25.5	± 0.4	± 0.8	17.0	250

STANDARD RANGE
optibelt KS V-GROOVED PULLEYS FOR KRAFTBANDS

Table 19: V-grooved pulleys for kraftbands with classic V-belts ISO 5291/ASAE S211.5

Profile	d_a	$\alpha°$ ± 30′	b_1 ≈	δh_{1max}	δh_{2max}	c	t_{min}	e	Tol e[1]	Σ Tol e[2]	f_{min}	$d_{d\ min}$
AJ/HA	80 to 125 > 125	34 38	13.0	0.20	0.35	1.5	12.0	15.88	± 0.3	± 0.6	9.0	80
BJ/HB	130 to 195 > 195	34 38	16.5	0.25	0.40	2.0	14.0	19.05	± 0.4	± 0.8	11.5	130
CJ/HC	210 to 325 > 325	34 38	22.4	0.30	0.45	3.0	19.0	25.40	± 0.5	± 1.0	16.0	210
DJ/HD	370 to 490 > 490	36 38	32.8	0.30	0.55	4.5	26.0	36.53	± 0.6	± 1.2	23.0	370

1) Tolerance for the centre distance "e" of two adjacent grooves.
2) The sum of all deviations from the nominal dimension "e" for all groove distances of a pulley must not exceed the given tolerance.

Table 20: Pulley width ranges for kraftbands

Profile	3V/9J	5V/15J	8V/25J	SPZ	SPA	SPB	SPC	AJ/HA	BJ/HB	CJ/HC	DJ/HD
Number of grooves	Face width b_2 for number of grooves z $b_2 = (z - 1)\ e + 2\ f$										
2	28.30	43.50	66.60	28.00	35.00	44.00	59.50	33.88	42.05	57.40	82.53
3	38.60	61.00	95.20	40.00	50.00	63.00	85.00	49.76	61.10	82.80	119.06
4	48.90	78.50	123.80	52.00	65.00	82.00	110.50	65.64	80.15	108.20	155.59
5	59.20	96.00	152.40	64.00	80.00	101.00	136.00	81.52	99.20	133.60	192.12
6	69.50	113.50	181.00	76.00	95.00	120.00	161.50	97.40	118.25	159.00	228.65
7	79.80	131.00	209.60	88.00	110.00	139.00	187.00	113.28	137.30	184.40	265.18
8	90.10	148.50	238.20	100.00	125.00	158.00	212.50	129.16	156.35	209.80	301.71
9	100.40	166.00	266.80	112.00	140.00	177.00	238.00	145.04	175.40	235.20	338.24
10	110.70	183.50	295.40	124.00	155.00	196.00	263.50	160.92	194.45	260.60	374.77
11	121.00	201.00	324.00	136.00	170.00	215.00	289.00	176.80	213.50	286.00	401.30
12	131.30	218.50	352.60	148.00	185.00	234.00	314.50	192.68	232.55	311.40	447.83
13	141.60	236.00	381.20	160.00	200.00	253.00	340.00	208.56	251.60	336.80	484.36
14	151.90	253.50	409.80	172.00	215.00	272.00	365.50	224.44	270.65	362.20	520.89
15	162.20	271.00	438.40	184.00	230.00	291.00	391.00	240.32	289.70	387.60	557.42
16	172.50	288.50	467.00	196.00	245.00	310.00	416.50	256.20	308.75	413.00	593.95
17	182.80	306.00	495.60	208.00	260.00	329.00	442.00	272.08	327.80	438.40	630.48
18	193.10	323.50	524.20	220.00	275.00	348.00	467.50	287.96	346.85	463.80	667.01
19	203.40	341.00	552.80	232.00	290.00	367.00	493.00	303.84	365.90	489.20	703.54
20	213.70	358.50	581.40	244.00	305.00	386.00	518.50	319.72	384.95	514.60	740.07
21	224.00	376.00	610.00	256.00	320.00	405.00	544.00	335.60	404.00	540.00	776.60
22	234.30	393.50	638.60	268.00	335.00	424.00	569.50	351.48	423.05	565.40	813.13
23	244.60	411.00	667.20	280.00	350.00	443.00	595.00	367.36	442.10	590.80	849.66
24	254.90	428.50	695.80	292.00	365.00	462.00	620.50	383.24	461.15	616.20	886.19
25	265.20	446.00	724.40	304.00	380.00	481.00	646.00	399.12	480.20	641.60	922.72
26	275.50	463.50	753.00	316.00	395.00	500.00	671.50	415.00	499.25	667.00	959.25
27	285.80	481.00	781.60	328.00	410.00	519.00	697.00	430.88	518.30	692.40	995.78
28	296.10	498.50	810.20	340.00	425.00	538.00	722.50	446.76	537.35	717.80	1032.31
29	306.40	516.00	838.80	352.00	440.00	557.00	748.00	462.64	556.40	743.20	1068.84
30	316.70	533.50	867.40	364.00	455.00	576.00	773.50	478.52	575.45	768.60	1105.37
31	327.00	551.00	896.00	376.00	470.00	595.00	799.00	494.40	594.50	794.00	1141.90
32	337.30	568.50	924.60	388.00	485.00	614.00	824.50	510.28	613.55	819.40	1178.43
33	347.60	586.00	953.20	400.00	500.00	633.00	850.00	526.16	632.60	844.80	1214.96
34	357.90	603.50	981.80	412.00	515.00	652.00	875.50	542.04	651.65	870.20	1251.49
35	368.20	621.00	1010.40	424.00	530.00	671.00	901.00	557.92	670.70	895.60	1288.02
36	378.50	638.50	1039.00	436.00	545.00	690.00	926.50	573.80	689.75	921.00	1324.55
37	388.80	656.00	1067.60	448.00	560.00	709.00	952.00	589.68	708.80	946.40	1361.08
38	399.10	673.50	1096.20	460.00	575.00	728.00	977.50	605.56	727.85	971.80	1397.61
39	409.40	691.00	1124.80	472.00	590.00	747.00	1003.00	621.44	746.90	997.20	1434.14
40	419.70	708.50	1153.40	484.00	605.00	766.00	1028.50	637.32	765.95	1022.60	1470.67

For KB sets please note the systematical classification.

STANDARD RANGE
OPTIBELT DEEP GROOVED PULLEYS

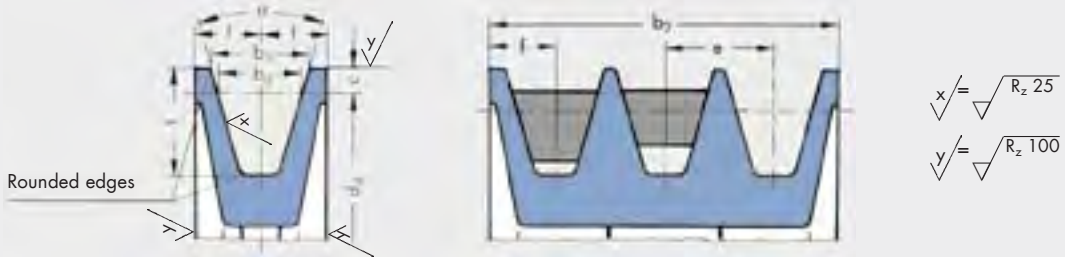


Table 21

Profile DIN 7753 Part 1/ISO		**SPZ**	**SPA**	**SPB**	**SPC**
Suitable for V-belts DIN 2215 and 2216		10	13	17	22
b_d		8.5	11.0	14.0	19.0
$b_1 \approx$		11.0	15.0	18.9	26.3
		11.3	15.4	19.5	27.3
c		4.0	6.5	8.0	12.0
e		14 ± 0.3	18 ± 0.3	23.0 ± 0.4	31 ± 0.5
f		8 ± 0.6	10 ± 0.6	12.5 ± 0.8	17 ± 1.0
t_{min}		13	18	22.5	31.5
α		34° ± 1° d_d 63 to 80	34° ± 1° d_d 90 to 118	34° ± 1° d_d 140 to 190	34° ± 30′ d_d 224 to 315
		38° ± 1° d_d > 80	38° ± 1° d_d >118	38° ± 1° d_d > 190	38° ± 30′ d_d > 315
α		34° ± 1° d_d 50 to 80	34° ± 1° d_d 71 to 118	34° ± 1° d_d 112 to 190	34° ± 30′ d_d 180 to 315
		38° ± 1° d_d > 80	38° ± 1° d_d >118	38° ± 1° d_d > 190	38° ± 30′ d_d > 315
Face width b_2 for number of grooves z: $b_2 = (z - 1)\ e + 2\ f$	**1**	16	20	25	34
	2	30	38	48	65
	3	44	56	71	96
	4	58	74	94	127
	5	72	92	117	158
	6	86	110	140	189
	7	100	128	163	220
	8	114	146	186	251
	9	128	164	209	282
	10	142	182	232	313
	11	160	200	255	344
	12	174	218	278	375

Please note the respective minimum pulley diameters.
Attention: Kraftbands are **not** suitable for deep grooved pulleys.

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPZ/Z/10

Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
50▲◆	1	●	11	0.3	1008
	2	●	11	0.4	1008
56▲◆	1	●	11	0.4	1008
	2	●	11	0.5	1108
60▲◆■	1	●	8	0.2	1008
	2	●	11	0.6	1108
63	1	●	8	0.2	1108
	2	●	6	0.3	1108
	3	●	6	0.4	1108
67	1	●	8	0.3	1108
	2	●	6	0.4	1108
	3	●	6	0.5	1108
71	1	●	8	0.3	1108
	2	●	6	0.4	1108
	3	●	6	0.6	1108
75	1	●	8	0.4	1108
	2	●	6	0.4	1210
	3	●	6	0.5	1210
80	1	●	8	0.5	1210
	2	●	6	0.6	1210
	3	●	6	0.7	1210
	4	●	6	0.8	1210
85	1	●	8	0.6	1210
	2	●	6	0.5	1610
	3	●	6	0.6	1610
	4	●	6	0.9	1610
	5	●	6	1.0	1610
90	1	●	8	0.7	1210
	2	●	6	0.7	1610
	3	●	6	0.8	1610
	4	●	6	1.0	1610
	5	●	6	1.2	1610
95	1	●	8	0.7	1210
	2	●	6	0.8	1610
	3	●	6	0.9	1610
	4	●	6	1.1	1610
	5	●	6	1.3	1610
100	1	●	8	0.8	1210
	2	●	6	0.9	1610
	3	●	6	1.1	1610
	4	●	6	1.1	1610
	5	●	6	1.3	2012
	6*	●	6	1.4	2012
106	1	●	8	0.9	1610
	2	●	6	1.1	1610
	3	●	6	1.3	1610
	4	●	6	1.3	1610
	5	●	6	1.5	2012
	6*	●	6	1.6	2012
112	1	●	8	1.0	1610
	2	●	6	1.3	1610
	3	●	6	1.3	2012
	4	●	6	1.5	2012
	5	●	6	1.8	2012
	6*	●	6	1.9	2012
118	1	●	8	0.9	1610
	2	●	6	1.3	1610
	3	●	6	1.6	2012
	4	●	6	1.8	2012
	5	●	6	1.8	2012
	6*	●	6	2.0	2517
125	1	●	8	1.0	1610
	2	●	6	1.4	1610
	3	●	2	1.8	2012
	4	●	2	2.2	2012
	5	●	6	2.3	2012
	6*	●	6	2.5	2517
132	1	●	8	1.1	1610
	2	●	6	1.5	1610
	3	●	2	2.3	2012
	4	●	2	2.5	2012
	5	●	6	2.7	2517
	6*	●	6	2.9	2517
140	1	●	8	1.2	1610
	2	●	2	1.7	1610
	3	●	2	2.6	2012
	4	●	2	2.9	2012
	5	●	2	3.2	2517
	6*	●	2	3.5	2517
	8*	●	4	4.0	2517
150	1	●	8	1.2	1610
	2	●	8	2.0	2012
	3	●	2	3.1	2012
	4	●	2	3.7	2517
	5	●	2	4.0	2517
	6*	●	2	4.4	2517
	8*	●	4	5.1	2517

▲ for profile 10 ◆ for profile ZX/X10 ■ for profile XPZ

Number of grooves z	1	2	3	4	5	6	8
Face width b_2 [mm]	16	28	40	52	64	76	100

Taper bush	1008	1108	1210	1610	2012	2517
Bore d_2 [mm] from ... to ...	10-25	10-28	11-32	14-42	14-50	16-60

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

* Non stock items

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPZ/Z/10

Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
160	1	●	8	1.3	1610
	2	●	8	2.5	2012
	3	●	2	3.6	2012
	4	●	2	4.4	2517
	5	●	2	4.8	2517
	6*	●	2	5.2	2517
	8*	●	4	5.6	2517
170	1	●	8	1.5	1610
	2	●	8	2.5	2012
	3	○	9	4.2	2012
	4	●	2	5.3	2517
	5	●	2	5.9	2517
	6*	●	2	6.5	2517
180	1	●	8	1.6	1610
	2	●	8	2.5	2012
	3	○	9	4.8	2012
	4	○	9	6.1	2517
	5	○	9	6.3	2517
	6*	○	9	6.8	2517
	8*	●	4	7.1	3020
190	1	●	8	1.8	1610
	2	●	8	2.6	2012
	3	○	9	4.9	2012
	4	○	9	5.3	2517
	5	○	9	6.3	2517
	6*	○	9	6.9	2517
200	1	●	8	2.3	2012
	2	●	8	2.8	2012
	3	○	9	3.5	2012
	4	○	9	4.7	2517
	5	○	9	5.5	2517
	6*	○	9	6.1	2517
	8*	●	4	9.3	3020
224	1	○	5	2.5	2012
	2	○	5	3.2	2012
	3	○	9	3.9	2012
	4	○	9	5.2	2517
	5	○	9	6.0	2517
	6*	○	9	6.6	2517
	8*	●	4	11.8	3020
250	1	x	7	2.8	2012
	2	x	7	3.5	2012
	3	x	10	4.3	2012
	4	x	10	5.7	2517
	5	x	10	7.0	2517
	6	x	10	7.0	2517
	8*	x	10	10.5	3020
280	1	x	7	2.9	2012
	2	x	7	4.0	2012
	3	x	7	5.3	2517
	4	x	10	6.4	2517
	5	x	10	7.1	2517
	6*	x	10	7.8	2517
	8*	x	10	10.8	3020
315	1	x	7	3.1	2012
	2	x	7	4.2	2012
	3	x	7	6.1	2517
	4	x	10	7.6	2517
	5	x	10	8.6	2517
	6*	x	10	9.3	2517
355	1	x	7	3.5	2012
	2	x	7	5.1	2012
	3	x	7	7.3	2517
	4	x	10	8.9	2517
	5	x	10	10.0	2517
	6*	x	10	10.7	2517
	8*	x	10	16.0	3030
400	1	x	7	6.0	2012
	2	x	7	6.3	2517
	3	x	7	8.0	2517
	4	x	10	10.1	2517
	5	x	10	11.7	3020
	6*	x	10	14.5	3020
	8*	x	10	18.2	3030
450	1	x	7	6.1	2517
	2	x	7	8.2	2517
	3	x	7	9.8	2517
	4	x	10	11.8	3020
	5	x	10	13.9	3020
	6*	x	10	16.9	3030
	8*	x	10	24.0	3535
500	2	x	7	9.1	2517
	3	x	7	11.4	2517
	4	x	10	14.3	3020
	5	x	10	17.6	3020
	6*	x	10	19.9	3020
630	3	x	7	15.9	2517
	4	x	10	20.0	3020
	5	x	10	22.7	3020
	6*	x	7	33.6	3535

Number of grooves z	1	2	3	4	5	6	8
Face width b_2 [mm]	16	28	40	52	64	76	100

Taper bush	1610	2012	2517	3020	3030	3535
Bore d_2 [mm] from ... to ...	14-42	14-50	16-60	25-75	35-75	35-90

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

* Non stock items

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPA/A/13

Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
63◆	1	●	11	0.6	1108
	2	●	11	0.8	1108
67◆	1	●	8	0.3	1108
	2	●	6	0.5	1108
71▲◆■	1	●	8	0.3	1108
	2	●	6	0.5	1108
	3	●	6	0.7	1108
75▲◆■	1	●	8	0.4	1108
	2	●	6	0.6	1108
	3	●	6	0.8	1108
80▲◆■	1	●	8	0.5	1210
	2	●	6	0.6	1210
	3	●	6	0.9	1210
85▲◆■	1	●	8	0.6	1210
	2	●	6	0.7	1210
	3	●	6	1.0	1210
90	1	●	8	0.7	1210
	2	●	6	0.7	1610
	3	●	6	1.0	1610
	4	●	6	1.2	1615
95	1	●	8	0.8	1210
	2	●	6	0.9	1610
	3	●	6	1.1	1610
	4	●	6	1.4	1615
100	1	●	8	0.8	1610
	2	●	6	0.9	1610
	3	●	2	1.2	1610
	4	●	2	1.7	1610
	5	●	6	1.9	1610
106	1	●	8	0.9	1610
	2	●	6	1.1	1610
	3	●	2	1.4	1610
	4	●	6	2.0	2012
	5	●	6	2.0	2012
112	1	●	8	1.0	1610
	2	●	6	1.2	1610
	3	●	6	1.3	2012
	4	●	6	1.9	2012
	5	●	6	2.1	2012
118	1	●	8	1.2	1610
	2	●	6	1.4	1610
	3	●	2	1.8	2012
	4	●	2	2.0	2012
	5	●	2	2.4	2012
125	1	●	8	1.4	1610
	2	●	2	1.7	1610
	3	●	2	2.0	2012
	4	●	2	2.5	2012
	5	●	2	2.7	2012
132	1	●	8	1.6	1610
	2	●	2	1.8	2012
	3	●	2	2.3	2012
	4	●	2	2.6	2517
	5	●	2	2.9	2517
140	1	●	8	1.8	1610
	2	●	2	2.0	2012
	3	●	2	2.8	2517
	4	●	2	3.1	2517
	5	●	2	3.4	2517
150	1	●	8	1.4	1610
	2	●	2	2.4	2012
	3	●	2	3.5	2517
	4	●	2	3.8	2517
	5	●	2	4.2	2517
160	1	○	5	1.9	1610
	2	●	2	2.9	2012
	3	●	2	3.9	2517
	4	●	2	4.4	2517
	5	●	2	5.1	2517
170	1	○	5	2.0	1610
	2	●	2	3.1	2012
	3	●	2	4.6	2517
	4	●	2	5.5	2517
	5	●	2	5.9	3020
180	1	○	5	2.1	1610
	2	○	9	3.4	2012
	3	●	2	5.1	2517
	4	●	2	5.9	2517
	5	●	2	6.2	3020
190	1	○	5	2.3	1610
	2	○	9	3.8	2012
	3	●	2	5.4	2517
	4	●	2	6.8	2517
	5	●	2	7.4	3020

▲ for profile 13 ◆ for profile AX/X13 ■ for profile XPA

Number of grooves z	1	2	3	4	5
Face width b_2 [mm]	20	35	50	65	80

Taper bush	1108	1210	1610	1615	2012	2517	3020
Bore d_2 [mm] from ... to ...	10-28	11-32	14-42	14-42	14-50	16-60	25-75

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPA/A/13											
Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush	Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
200	1	○	5	2.6	2012	450	1	×	7	7.0	2012
	2	○	5	4.1	2517		2	×	7	10.3	2517
	3	○	9	4.9	2517		3	×	7	14.1	3020
	4	●	2	7.4	3020		4	×	10	15.5	3020
	5	●	4	8.4	3020		5	×	7	24.3	3535
212	1	○	5	2.7	2012	500	1	×	7	8.0	2517
	2	○	5	4.3	2517		2	×	7	11.6	2517
	3	○	9	5.2	2517		3	×	7	16.0	3020
	4	●	2	7.3	3020		4	×	10	18.2	3020
	5	●	2	8.2	3020		5	×	7	27.3	3535
224	1	×	7	2.7	2012	560	1	×	7	11.6	2517
	2	○	5	4.4	2517		2	×	7	15.5	3020
	3	○	9	5.5	2517		3	×	7	17.8	3020
	4	●	2	7.4	3020		4	×	7	26.7	3535
	5	●	2	8.3	3020		5	×	7	30.4	3535
236	1	×	7	2.8	2012	630	1	×	7	10.1	2517
	2	○	5	4.6	2517		2	×	7	16.0	3020
	3	○	9	5.7	2517		3	×	7	22.0	3020
	4	●	2	7.8	3020		4	×	7	30.8	3535
	5	●	2	8.7	3020		5	×	7	33.7	3535
250	1	×	7	2.9	2012						
	2	×	7	4.8	2517						
	3	○	9	5.9	2517						
	4	○	9	8.0	3020						
	5	○	9	9.0	3020						
280	1	×	7	3.3	2012						
	2	×	7	5.4	2517						
	3	○	9	6.7	2517						
	4	○	9	8.8	3020						
	5	○	5	15.5	3535						
315	1	×	7	3.6	2012						
	2	×	7	6.0	2517						
	3	○	5	8.3	3020						
	4	○	9	9.7	3020						
	5	○	5	17.0	3535						
355	1	×	7	4.2	2012						
	2	×	7	6.7	2517						
	3	×	7	9.2	3020						
	4	×	10	11.0	3020						
	5	×	7	18.6	3535						
400	1	×	7	4.9	2012						
	2	×	7	8.1	2517						
	3	×	7	11.0	3020						
	4	×	10	12.8	3020						
	5	×	7	21.0	3535						

Number of grooves z	1	2	3	4	5
Face width b_2 [mm]	20	35	50	65	80

Taper bush	2012	2517	3020	3535
Bore d_2 [mm] from ... to ...	14-50	16-60	25-75	35-90

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPB/B/17											
Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush	Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
100◆	1	●	1	0.9	1610	180	1	●	1	4.1	1610
	2	●	6	1.2	1610		2	●	8	4.5	2517
	3	●	6	1.7	1610		3	●	2	5.5	2517
112▲◆■	1	●	1	1.1	1610		4	●	4	6.9	2517
	2	●	6	1.5	1610		5	●	4	7.1	3020
	3	●	6	2.0	1610		6	●	4	7.7	3020
118▲◆■	1	●	1	1.3	1610		8	●	4	9.5	3020
	2	●	6	1.7	1610	190	1	●	8	4.6	2012
	3	●	6	2.3	1610		2	●	8	5.0	2517
125▲◆■	1	●	1	1.5	1610		3	●	2	6.3	2517
	2	●	2	1.9	2012		4	●	4	7.6	2517
	3	●	2	2.4	2012		5	●	4	8.1	3020
	4	●	4	3.0	2012		6	●	4	9.2	3020
	5	●	6	3.5	2012		8	●	4	11.2	3030
132▲	1	●	1	1.8	1610	200	1	●	8	5.0	2012
	2	●	2	2.2	2012		2	●	8	5.4	2517
	3	●	2	2.8	2012		3	●	2	6.5	2517
	4	●	4	3.4	2012		4	●	2	8.8	3020
	5	●	4	3.7	2012		5	●	2	9.1	3020
140	1	●	1	2.3	1610		6	●	4	10.3	3020
	2	●	2	2.7	2012		8	●	4	13.5	3535
	3	●	2	3.3	2012	212	1	●	8	4.2	2012
	4	●	2	3.7	2517		2	●	8	4.9	2517
	5	●	2	4.5	2517		3	●	2	6.0	2517
	6	●	4	4.6	2517		4	●	2	9.8	3020
150	1	●	1	2.7	1610		5	●	2	11.0	3020
	2	●	2	3.1	2012		6	●	4	14.3	3535
	3	●	2	3.9	2517		8	●	4	16.6	3535
	4	●	2	4.4	2517	224	1	●	8	4.7	2012
	5	●	4	5.2	2517		2	●	8	5.3	2517
	6	●	4	5.6	2517		3	●	2	6.3	2517
160	1	●	1	2.5	1610		4	●	2	11.3	3020
	2	●	2	2.9	2012		5	●	2	12.7	3020
	3	●	2	4.2	2517		6	●	4	17.0	3535
	4	●	4	4.9	2517		8	●	4	19.3	3535
	5	●	4	6.0	2517		10	●	4	21.8	3535
	6	●	4	5.4	3020	236	1	●	8	5.0	2012
170	1	●	1	2.9	1610		2	●	8	5.5	2517
	2	●	2	3.3	2012		3	×	10	7.0	2517
	3	●	2	4.9	2517		4	×	10	14.5	3020
	4	●	4	5.7	2517		5	●	6	16.9	3535
	5	●	4	6.1	3020		6	●	4	20.0	3535
	6	●	4	6.5	3020		8	●	4	22.3	3535
	8	●	4	8.0	3020		10	●	4	25.3	3535

▲ for profile 17 ◆ for profile BX/X17 ■ for profile XPB

Number of grooves z	1	2	3	4	5	6	8	10
Face width b_2 [mm]	25	44	63	82	101	120	158	196

Taper bush	1610	2012	2517	3020	3030	3535
Bore d_2 [mm] from ... to ...	14-42	14-50	16-60	25-75	35-75	35-90

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPB/B/17											
Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush	Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
250	1	●	8	5.4	2012	355	2	x	7	8.7	3020
	2	x	7	5.5	2517		3	x	10	10.8	3020
	3	●	2	7.7	3020		4	x	7	18.6	3535
	4	●	2	19.6	3020		5	x	10	20.8	3535
	5	●	2	21.7	3535		6	O	9	22.8	3535
	6	●	4	23.3	3535		8	x	10	27.0	3535
	8	●	4	27.5	3535		10*	x	10	38.0	4040
	10	●	4	29.3	3535	375	2	x	7	9.5	3020
265	2	●	7	6.2	2517		3	x	10	11.5	3020
	3	O	9	8.0	3020		4	x	10	16.5	3525
	4	O	9	9.5	3020		6	x	10	25.0	3535
	6	O	9	16.7	3525		8	x	10	28.0	4040
	8	O	9	24.0	3525	400	2	x	7	10.0	3020
280	1	x	7	6.1	2012		3	x	7	18.3	3535
	2	x	7	6.8	2517		4	x	7	20.5	3535
	3	x	10	8.6	3020		5	x	10	23.4	3535
	4	O	9	10.1	3020		6	x	10	25.1	3535
	5	O	9	17.8	3535		8	x	10	36.5	4040
	6	O	9	19.6	3535		10*	x	10	41.0	4040
	8	O	9	26.7	3535	425	2	x	7	11.5	3020
	10	O	9	30.5	3535		3	x	7	18.0	3535
300	2	x	7	7.3	2517		4	x	10	19.5	3535
	3	x	10	9.2	3020		6	x	10	25.1	4040
	4	O	9	14.3	3020		8	x	10	52.5	4545
	5	O	9	18.2	3535	450	2	x	7	12.1	3020
	6	O	9	21.9	3535		3	x	7	21.9	3535
	8	O	9	26.2	3535		4	x	7	24.5	3535
315	1	x	7	7.2	2012		5	x	10	27.3	3535
	2	x	7	7.8	2517		6	x	10	35.5	4040
	3	x	10	9.6	3020		8	x	10	40.9	4040
	4	O	5	17.1	3535		10*	x	10	53.5	4545
	5	O	9	18.8	3535	500	2	x	7	13.2	3020
	6	O	9	23.0	3535		3	x	7	23.1	3535
	8	O	9	26.0	3535		4	x	7	26.6	3535
	10	O	9	31.5	3535		5	x	10	29.9	3535
335	2	x	7	7.8	2517		6	x	10	38.9	4040
	3	x	10	10.5	3020		8	x	10	45.5	4040
	4	x	7	18.3	3535		10*	x	10	61.0	4545
	5	x	10	19.5	3535	560	2	x	7	16.5	3030
	6	x	10	22.0	3535		3	x	7	25.9	3535
	8	x	10	28.2	3535		4	x	7	29.0	3535
	10*	x	10	36.0	4040		5	x	7	35.3	4040
							6	x	10	43.1	4040
							8	x	10	49.0	4545
							10*	x	10	55.7	4545

Number of grooves z	1	2	3	4	5	6	8	10
Face width b_2 [mm]	25	44	63	82	101	120	158	196

Taper bush	2012	2517	3020	3030	3535	4040	4545
Bore d_2 [mm] from ... to ...	14-50	16-60	25-75	35-75	35-90	40-100	55-110

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

* Non stock items

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPB/B/17											
Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush	Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
630	2	x	7	18.5	3020						
	3	x	7	28.9	3535						
	4	x	7	33.3	3535						
	5	x	7	43.1	4040						
	6	x	10	49.2	4040						
	8	x	10	62.0	4545						
	10*	x	10	72.0	4545						
710	3	x	7	33.2	3535						
	4	x	7	39.1	3535						
	5	x	7	50.2	4040						
	6	x	10	62.3	4545						
	8	x	10	71.0	4545						
	10*	x	10	80.0	4545						
800	3	x	7	36.7	3535						
	4	x	7	48.8	4040						
	5	x	7	56.1	4040						
	6	x	10	71.4	4545						
	8	x	10	90.9	4545						
	10*	x	10	102.0	4545						
900	3	x	7	46.8	3535						
	4	x	7	60.0	4040						
	5	x	7	74.8	4545						
	6	x	10	81.5	4545						
	8	x	10	110.0	4545						
	10*	x	10	126.0	5050						
1000	3	x	7	56.5	4040						
	4	x	7	66.5	4040						
	5	x	7	80.5	4545						
	6	x	10	90.0	4545						
	8	x	10	132.0	5050						
	10*	x	10	147.0	5050						

Number of grooves z	2	3	4	5	6	8	10
Face width b_2 [mm]	44	63	82	101	120	158	196

Taper bush	3020	3030	3535	4040	4545	5050
Bore d_2 [mm] from ... to ...	25-75	35-75	35-90	40-100	55-110	70-125

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

* Non stock items

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPC/C/22											
Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush	Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
200▲◆■	3	●	4	9.0	2517	315	3	○	5	21.6	3535
	4	●	4	10.5	3020		4	○	9	24.6	3535
	5	●	4	14.0	3535		5	○	9	29.0	3535
	6	●	4	17.0	3535		6	○	9	31.4	3535
212▲◆■	3	●	4	10.0	3020		8	●	4	50.0	4040
	4	●	4	12.5	3020		10*	○	9	58.0	4545
	5	●	4	15.0	3535	335	3	○	5	22.5	3535
	6	●	4	18.0	3535		4	○	9	26.5	3535
224	2	●	4	8.1	3020		5	○	9	30.0	3535
	3	●	4	11.0	3020		6	○	9	35.0	3535
	4	●	4	14.0	3535		8	○	9	58.0	4040
	5	●	4	16.2	3535	355	3	○	5	22.9	3535
	6	●	4	19.0	3535		4	○	9	28.3	3535
	8	●	4	24.9	3535		5	○	9	32.5	3535
236	3	●	4	12.0	3020		6	○	9	36.0	3535
	4	●	4	17.2	3535		8	○	9	67.5	4040
	5	●	4	19.1	3535		10*	○	9	121.0	4545
	6	●	4	20.8	3535	375	3	○	5	23.8	3535
	8	●	4	25.5	3535		4	○	9	30.0	3535
250	2	●	4	9.8	3020		5	○	9	33.0	3535
	3	●	4	14.5	3020		6	○	9	45.5	4040
	4	●	4	20.7	3535		8	○	9	68.0	4545
	5	●	4	22.8	3535	400	3	x	7	24.1	3535
	6	●	4	26.0	3535		4	x	10	28.0	3535
	8	●	4	29.7	3535		5	x	10	34.0	3535
	10*	●	4	34.0	4040		6	○	9	48.0	4040
265	3	●	8	21.2	3535		8	○	9	65.0	4545
	4	○	9	24.0	3535		10*	○	9	88.0	5050
	5	○	9	26.2	3535	425	3	x	7	26.0	3535
	6	○	9	29.0	3535		4	x	10	31.0	3535
	8	○	9	33.3	3535		5	○	9	45.0	4040
280	3	●	8	24.0	3535		6	○	9	58.0	4545
	4	○	9	29.0	3535		8	○	9	74.0	4545
	5	○	9	31.0	3535	450	3	x	7	28.6	3535
	6	○	9	33.8	3535		4	x	10	33.5	3535
	8	○	9	37.5	3535		5	x	10	45.0	4040
	10*	○	9	45.0	4040		6	○	9	61.1	4545
300	3	○	5	21.0	3535		8	○	9	78.7	5050
	4	○	9	25.0	3535		10*	○	9	101.0	5050
	5	○	9	28.5	3535	475	3	x	7	40.0	3535
	6	○	9	29.0	3535		4	x	10	47.0	3535
	8	●	4	46.5	4040		5	x	10	47.2	4040
	10*	○	9	53.5	4545		6	○	9	62.8	4545
							8	○	9	81.5	5050

▲ for profile 22 ◆ for profile CX/X22 ■ for profile XPC

Number of grooves z	3	4	5	6	8	10
Face width b_2 [mm]	85	110.5	136	161.5	212.5	263.5
Taper bush	2517	3020	3535	4040	4545	5050
Bore d_2 [mm] from ... to ...	16-60	25-75	35-90	40-100	55-110	70-125

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

* Non stock items

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR TAPER BUSHES – GROOVE ACCORDING TO DIN 2211

Profile SPC/C/22										
Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush	Datum diameter d_d [mm]	Number of grooves	Design		Weight without bushes [≈ kg]	Taper bush
500	3	x	7	30.9	3535						
	4	x	10	39.0	3535						
	5	x	10	48.7	4040						
	6	x	10	60.2	4545						
	8	O	9	87.4	5050						
	10*	O	9	127.0	5050						
560	3	x	7	36.0	3535						
	4	x	10	50.0	4040						
	5	x	10	63.0	4545						
	6	x	10	77.0	5050						
	8	x	10	94.0	5050						
	10*	O	9	115.0	5050						
630	3	x	7	48.5	4040						
	4	x	7	61.0	4545						
	5	x	10	77.0	5050						
	6	x	10	86.0	5050						
	8	x	10	105.5	5050						
	10*	O	9	130.0	5050						
710	3	x	7	–	4040						
	4	x	7	–	4545						
	5	x	10	–	5050						
	6	x	10	–	5050						
	8	x	10	–	5050						
	10*	O	9	–	5050						
800	3	x	7	–	4545						
	4	x	7	–	5050						
	5	x	10	–	5050						
	6	x	10	–	5050						
	8	x	10	–	5050						
	10*	O	9	–	5050						
1000	5	x	10	–	5050						
	6	x	10	–	5050						
	8	x	10	–	5050						
	10*	O	9	–	5050						
1250	5	x	10	–	5050						
	6	x	10	–	5050						
	8	x	10	–	5050						
	10*	O	9	–	5050						

Number of grooves z	3	4	5	6	8	10
Face width b_2 [mm]	85	110.5	136	161.5	212.5	263.5

Taper bush	3535	4040	4545	5050
Bore d_2 [mm] from ... to ...	35-90	40-100	55-110	70-125

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Material: EN-GJL-200 (GG 20)
DIN EN 1561

* Non stock items

Bore diameter d_2 see page 72

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR CYLINDRICAL BORES – GROOVE ACCORDING TO DIN 2211

Profile SPZ/Z/10											
Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]	Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]
45▲◆	1	O	0.23	16	24	132	1	O	0.81	30	24
	2	O	0.30	16	35		2	O	1.30	38	35
	3	O	0.40	16	35		3	O	1.62	40	40
50▲◆	1	O	0.30	20	24	140	1	O	0.92	28	24
	2	O	0.40	20	35		2	O	1.40	38	38
	3	O	0.50	20	40		3	O	1.69	38	40
56▲◆■	1	O	0.32	20	24	150	1	x	1.05	28	24
	2	O	0.45	25	35		2	O	1.50	38	38
	3	O	0.65	25	40		3	O	1.85	38	40
63	1	O	0.34	25	24	160	1	x	1.22	32	30
	2	O	0.60	25	35		2	x	1.60	38	38
	3	O	0.85	25	40		3	x	2.40	42	40
71	1	O	0.34	25	24	170	1	x	1.66	40	30
	2	O	0.62	25	35		2	x	1.85	40	38
	3	O	1.00	30	40		3	x	3.00	42	40
75	1	O	0.35	24	24	180	1	x	2.10	32	30
	2	O	0.64	24	35		2	x	3.05	38	38
	3	O	1.05	28	40		3	x	3.50	42	40
80	1	O	0.35	25	24	190	1	x	2.25	35	30
	2	O	0.65	30	35		2	x	2.35	35	38
	3	O	1.10	38	35		3	x	4.00	35	40
85	1	O	0.30	25	24	200	1	x	2.40	32	38
	2	O	0.70	30	35		2	x	2.85	38	38
	3	O	1.10	38	35		3	x	4.45	42	40
90	1	O	0.38	25	24	212	1	x	2.60	35	30
	2	O	0.75	30	35		2	x	3.40	35	38
	3	O	1.15	38	38		3	x	5.00	38	40
95	1	O	0.40	28	24	225	1	x	2.80	32	38
	2	O	0.83	28	35		2	x	4.00	38	38
	3	O	1.20	38	38		3	x	5.30	42	40
100	1	O	0.48	28	24	250	1	x	3.30	32	38
	2	O	0.90	30	35		2	x	4.80	38	38
	3	O	1.25	38	38		3	x	6.00	42	40
106	1	O	0.50	30	24	280	1	x	3.85	35	34
	2	O	0.96	28	35		2	x	5.20	42	38
	3	O	1.32	38	38		3	x	7.00	48	40
112	1	O	0.54	28	24	315	1	x	4.35	35	34
	2	O	1.00	30	35		2	x	6.80	42	38
	3	O	1.40	38	38		3	x	8.25	48	40
118	1	O	0.60	28	24	355	1	x	4.60	35	34
	2	O	1.10	38	35		2	x	8.00	42	40
	3	O	1.47	38	38		3	x	10.00	48	45
125	1	O	0.70	28	24						
	2	O	1.20	30	35						
	3	O	1.55	38	40						

▲ for profile Z/10 ◆ for profile ZX/X10 ■ for profile XPZ

Number of grooves z	1	2	3
Face width b_2 [mm]	16	28	40

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Hub position: flush one-sided
Material: EN-GJL-200 (GG 20) – DIN EN 1561

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR CYLINDRICAL BORES – GROOVE ACCORDING TO DIN 2211

Profile SPA/A/13											
Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]	Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]
50	1	O	0.34	18	34	106	1	O	0.88	28	34
	2	O	0.48	18	49		2	O	1.65	28	49
	3	O	0.55	18	47		3	O	2.20	32	42
56	1	O	0.42	20	34		4▽	O	3.24	32	53
	2	O	0.62	20	49		5▽	O	3.85	35	60
	3	O	0.74	20	47	112	1	O	1.09	28	34
63◆	1	O	0.52	25	34		2	O	1.75	38	49
	2	O	0.77	25	49		3	O	2.38	38	42
	3	O	0.85	25	47		4▽	O	3.37	42	53
	4▽	O	1.23	25	60		5▽	O	3.95	42	60
	5▽	O	1.48	25	70	118	1	O	1.10	32	34
71▲◆■	1	O	0.50	25	34		2	O	1.80	38	49
	2	O	0.89	28	49		3	O	2.42	42	42
	3	O	0.96	32	42		4▽	O	3.42	42	53
	4▽	O	1.47	32	60		5▽	O	4.10	48	65
	5▽	O	1.83	32	70	125	1	O	1.38	32	34
75▲◆■	1	O	0.53	24	34		2	O	1.90	38	49
	2	O	1.02	24	49		3	O	2.55	42	42
	3	O	1.08	24	42		4▽	O	3.49	42	53
	4▽	O	1.76	24	60		5▽	O	4.40	48	65
	5▽	O	1.92	28	82	132	1	O	1.45	32	34
80▲◆■	1	O	0.56	28	34		2	O	2.20	38	49
	2	O	1.04	32	49		3	O	2.58	42	42
	3	O	1.19	38	42		4▽	O	3.58	42	53
	4▽	O	1.89	38	60		5▽	O	4.75	48	65
	5▽	O	2.00	38	55	140	1	O	1.52	32	34
85▲◆■	1	O	0.64	24	34		2	O	2.33	38	49
	2	O	1.20	28	49		3	O	2.63	42	42
	3	O	1.40	28	42		4▽	O	3.65	42	53
	4▽	O	1.98	28	53		5▽	O	4.95	48	65
	5▽	O	2.20	32	55	150	1	x	1.60	38	36
90	1	O	0.88	28	34		2	x	2.59	38	49
	2	O	1.47	32	49		3	O	2.95	42	42
	3	O	1.62	38	42		4▽	O	4.04	42	53
	4▽	O	2.22	42	53		5▽	O	5.15	48	65
	5▽	O	2.51	42	67	160	1	x	1.75	38	36
95	1	O	0.76	28	34		2	x	2.40	38	49
	2	O	1.57	28	49		3	x	2.80	42	42
	3	O	1.89	28	42		4▽	O	3.62	48	60
	4▽	O	2.47	32	53		5▽	O	5.45	48	70
	5▽	O	2.75	35	67	170	1	x	2.00	35	36
100	1	O	0.84	28	34		2	x	2.90	35	49
	2	O	1.36	32	49		3	x	3.20	35	42
	3	O	1.98	38	52		4▽	x	4.20	35	60
	4▽	O	2.72	42	53		5▽	x	5.80	38	70
	5▽	O	3.10	42	60						

▲ for profile A/13 ◆ for profile AX/X13 ■ for profile XPA

▽ d_d + 4 mm

Number of grooves z	1	2	3	4	5
Face width b_2 [mm]	20	35	50	67	82

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Hub position: flush one-sided
Material: EN-GJL-200 (GG 20) – DIN EN 1561

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR CYLINDRICAL BORES – GROOVE ACCORDING TO DIN 2211

Profile SPA/A/13											
Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]	Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]
180	1	x	2.02	38	36	315	1	x	4.78	48	44
	2	x	3.15	42	49		2	x	6.60	48	53
	3	x	3.60	42	42		3	x	8.75	55	47
	4▽	x	4.65	48	60		4▽	x	11.80	55	60
	5▽	x	6.13	48	70		5▽	x	12.50	60	70
190	1	x	2.02	38	36	355	1	x	5.50	48	44
	2	x	3.20	42	49		2	x	7.70	55	53
	3	x	4.00	42	42		3	x	9.55	55	47
	4▽	x	5.24	48	60		4▽	x	11.80	55	60
	5▽	x	6.31	48	70		5▽	x	12.85	60	70
200	1	x	2.40	38	36	400	1▽	x	6.85	50	50
	2	x	2.85	42	49		2▽	x	8.80	55	53
	3	x	4.21	48	42		3▽	x	10.95	60	47
	4▽	x	4.95	55	60		4▽	x	12.40	60	67
	5▽	x	6.45	60	70		5▽	x	15.90	60	82
212	1	x	2.70	40	36	450	1▽	x	7.50	55	50
	2	x	3.40	42	49		2▽	x	9.40	55	53
	3	x	4.40	42	42		3▽	x	12.15	60	47
	4▽	x	5.68	42	60		4▽	x	14.20	65	67
	5▽	x	6.85	42	70		5▽	x	18.30	65	82
225	1	x	2.75	40	36	500	1▽	x	10.50	55	50
	2	x	3.87	42	49		2▽	x	10.70	55	55
	3	x	4.60	42	42		3▽	x	13.45	60	60
	4▽	x	6.50	42	60		4▽	x	16.25	65	67
	5▽	x	7.25	42	70		5▽	x	22.80	65	82
236	1	x	3.30	38	36	560	1▽	x	14.00	55	60
	2	x	4.10	42	49		2▽	x	13.10	55	60
	3	x	4.90	48	42		3▽	x	15.60	60	74
	4▽	x	6.20	55	60		4▽	x	19.40	65	67
	5▽	x	7.50	55	70		5▽	x	24.50	65	82
250	1	x	3.40	42	36						
	2	x	4.32	48	49						
	3	x	5.30	48	42						
	4▽	x	7.00	55	60						
	5▽	x	7.85	60	70						
280	1	x	3.90	42	44						
	2	x	5.35	48	53						
	3	x	6.50	48	47						
	4▽	x	8.52	55	60						
	5▽	x	9.90	60	70						
300	1	x	4.25	48	44						
	2	x	5.90	48	53						
	3	x	7.50	55	47						
	4▽	x	9.82	55	60						
	5▽	x	11.30	60	70						

▽ d_d + 4 mm

▽ d_d + 4 mm

Number of grooves z	1	2	3	4	5
Face width b_2 [mm]	20	35	50	67	82

● Solid pulley
○ Plate pulley (with or without holes)
× Spoked pulley
Hub position: flush one-sided
Material: EN-GJL-200 (GG 20) – DIN EN 1561

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR CYLINDRICAL BORES – GROOVE ACCORDING TO DIN 2211

Profile SPB/B/17

Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]
56	1	O	0.61	20	41
	2	O	1.00	20	60
	3	O	1.00	22	62
63	1	O	0.76	20	41
	2	O	1.20	20	60
	3	O	1.20	22	62
71	1	O	0.79	22	41
	2	O	1.31	22	60
	3	O	1.60	22	55
75	1	O	0.82	25	41
	2	O	1.42	25	60
	3	O	1.85	25	62
80	1	O	1.03	28	41
	2	O	1.65	28	60
	3	O	2.05	28	70
	5▽	O	2.73	28	80
85	1	O	1.10	30	41
	2	O	1.70	30	60
	3	O	2.15	30	55
	4▽	O	2.70	30	70
	5▽	O	3.00	30	75
90◆	1	O	1.17	32	41
	2	O	1.80	38	60
	3	O	2.30	38	55
	4▽	O	3.05	38	70
	5▽	O	3.30	38	75
95◆	1	O	1.25	35	41
	2	O	2.00	38	60
	3	O	2.50	38	67
	4▽	O	2.90	38	70
	5▽	O	3.60	38	75
100◆	1	O	1.32	32	41
	2	O	2.11	38	60
	3	O	2.85	38	55
	4▽	O	3.81	38	70
	5▽	O	4.45	38	75
	6▽	O	5.20	38	124
106◆	1	O	1.45	28	41
	2	O	2.00	28	60
	3	O	3.00	30	55
	4▽	O	4.30	30	70
	5▽	O	5.10	32	75
	6▽	O	6.00	32	124
112▲◆■	1	O	1.53	32	41
	2	O	2.35	38	60
	3	O	3.10	38	55
	4▽	O	4.75	42	67
	5▽	O	5.61	42	75
	6▽	O	6.15	42	85
118▲◆■	1	O	1.57	32	41
	2	O	2.43	38	60
	3	O	3.20	42	55
	4▽	O	6.20	42	70
	5▽	O	7.20	42	75
	6▽	O	6.60	42	85
125▲◆■	1	O	1.66	32	41
	2	O	2.55	38	60
	3	O	3.28	42	55
	4▽	O	4.74	42	70
	5▽	O	8.60	42	75
	6▽	O	8.00	48	85
132▲◆■	1	O	1.88	30	41
	2	O	2.63	30	60
	3	O	3.49	42	55
	4▽	O	6.30	42	70
	5▽	O	9.40	42	75
	6▽	O	8.50	42	85
140	1	O	2.10	32	41
	2	O	2.90	38	60
	3	O	3.90	42	55
	4▽	O	6.92	42	70
	5▽	O	7.58	48	75
	6▽	O	11.40	48	85
150	1	O	2.43	32	43
	2	O	3.24	38	48
	3	O	4.28	42	60
	4▽	O	6.76	42	70
	5▽	O	8.43	48	75
	6▽	O	12.10	48	85
160	1	x	2.50	38	43
	2	x	3.32	42	48
	3	x	4.60	48	60
	4▽	O	7.01	48	70
	5▽	O	9.35	48	75
	6▽	O	12.85	55	85
170	1	x	2.85	42	43
	2	x	3.44	42	48
	3	x	4.89	42	60
	4▽	O	7.20	48	70
	5▽	O	8.90	48	75
	6▽	O	13.10	48	85

▲ for profile B/17 ◆ for profile BX/X17 ■ for profile XPB

▽ d_d + 5.5 mm

Number of grooves z	1	2	3	4	5	6
Face width b_2 [mm]	25	44	63	86	105	124

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Hub position: flush one-sided
Material: EN-GJL-200 (GG 20) – DIN EN 1561

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR CYLINDRICAL BORES – GROOVE ACCORDING TO DIN 2211

Profile SPB/B/17											
Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]	Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]
180	1	x	3.10	38	43	315	1	x	6.40	48	49
	2	x	3.90	42	48		2	x	8.22	55	55
	3	x	5.28	48	60		3	x	12.90	55	67
	4▽	x	7.42	48	70		4▽	x	13.00	60	80
	5▽	O	9.05	55	75		5▽	x	17.60	65	80
	6▽	O	10.80	60	85		6▽	x	20.60	75	90
190	1	x	3.19	42	43	355	1	x	7.00	48	49
	2	x	4.22	42	48		2	x	9.70	55	55
	3	x	5.49	42	60		3	x	13.40	55	67
	4▽	x	7.69	48	70		4▽	x	18.25	60	80
	5▽	O	9.22	50	75		5▽	x	18.75	65	75
	6▽	O	11.95	55	85		6▽	x	19.75	75	90
200	1	x	3.40	38	43	400	1▽	x	8.46	50	49
	2	x	4.45	42	48		2▽	x	10.00	55	55
	3	x	5.85	48	60		3▽	x	14.30	60	67
	4▽	x	7.98	50	60		4▽	x	18.50	65	80
	5▽	O	9.50	55	80		5▽	x	22.50	70	85
	6▽	O	12.20	60	90		6▽	x	28.00	75	90
212	1	x	3.75	42	43	450	1▽	x	9.86	50	55
	2	x	4.66	42	48		2▽	x	10.87	55	55
	3	x	6.15	48	60		3▽	x	15.05	60	67
	4▽	x	7.70	50	70		4▽	x	20.50	65	80
	5▽	x	10.30	50	80		5▽	x	26.00	70	80
	6▽	O	13.51	55	90		6▽	x	28.90	75	90
224	1	x	4.00	42	43	500	1▽	x	10.70	50	55
	2	x	5.40	42	48		2▽	x	13.70	60	59
	3	x	6.90	48	60		3▽	x	15.20	65	67
	4▽	x	8.64	55	70		4▽	x	21.30	70	80
	5▽	O	11.72	50	90		5▽	x	30.00	75	80
	6▽	O	14.75	55	90		6▽	x	33.80	80	90
250	1	x	4.20	42	43	560	2▽	x	15.00	60	55
	2	x	6.10	48	55		3▽	x	24.20	65	67
	3	x	8.60	55	60		4▽	x	26.20	70	80
	4▽	x	9.70	60	70		5▽	x	34.40	75	80
	5▽	x	13.20	65	80		6▽	x	39.00	80	90
	6▽	x	17.00	65	90	630	2▽	x	20.20	60	80
280	1	x	5.70	48	49		3▽	x	27.00	65	80
	2	x	7.04	48	55		4▽	x	30.80	75	86
	3	x	9.67	55	60		5▽	x	37.20	80	90
	4▽	x	11.52	60	70		6▽	x	44.00	90	100
	5▽	x	15.50	65	80						
	6▽	x	18.00	65	90						
300	1	x	5.90	48	49						
	2	x	7.50	48	55						
	3	x	10.50	55	67						
	4▽	x	12.40	60	80						
	5▽	x	15.40	65	80						
	6▽	x	18.25	70	90						

▽ d_d + 5.5 mm

Number of grooves z	1	2	3	4	5	6
Face width b_2 [mm]	25	44	63	86	105	124

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Hub position: flush one-sided
Material: EN-GJL-200 (GG 20) – DIN EN 1561

STANDARD RANGE

optibelt KS V-GROOVED PULLEYS FOR CYLINDRICAL BORES – GROOVE ACCORDING TO DIN 2211

Profile SPC/C/22											
Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]	Datum diameter d_d [mm]	Number of grooves	Design	Weight [≈ kg]	Finished bore d_{max} [mm]	Hub length l [mm]
180▲◆■	1	O	4.20	40	54	450	2	x	21.10	70	80
	2	O	7.20	50	64		3	x	26.30	75	90
	3	O	10.40	55	90		4	x	31.10	75	105
	4	O	10.50	55	95		5	x	42.20	80	110
	5	O	18.00	60	100		6	x	48.50	80	120
	6	O	23.70	65	115	500	3	x	28.40	75	90
200▲◆■	1	O	4.80	40	54		4	x	34.10	75	105
	2	O	7.80	50	64		5	x	48.20	80	110
	3	O	10.60	55	90		6	x	52.50	80	120
	4	O	11.20	60	95	560	3	x	31.10	75	90
	5	O	15.40	65	100		4	x	39.00	75	105
	6	O	27.00	70	125		5	x	54.10	85	110
225	1	x	5.50	48	54		6	x	61.50	85	120
	2	x	7.80	52	64	630	3	x	38.50	80	90
	3	x	10.60	52	90		4	x	48.10	80	105
	4	x	13.10	55	95		5	x	62.20	85	110
	5	x	16.70	60	100		6	x	73.20	85	120
	6	x	35.00	60	115						
250	1	x	7.30	52	54						
	2	x	8.80	52	64						
	3	x	11.10	65	90						
	4	x	15.30	70	95						
	5	x	19.00	75	100						
	6	x	23.70	60	115						
280	1	x	8.70	52	54						
	2	x	10.90	55	64						
	3	x	15.60	70	90						
	4	x	17.50	75	95						
	5	x	20.50	75	100						
315	1	x	9.10	52	54						
	2	x	13.00	55	74						
	3	x	17.10	70	90						
	4	x	20.00	75	95						
	5	x	24.70	80	100						
	6	x	31.20	85	115						
335	2	x	14.00	55	74						
	3	x	18.30	55	90						
	4	x	22.40	60	95						
	5	x	28.30	65	100						
	6	x	34.40	75	115						
355	2	x	15.20	60	74						
	3	x	19.20	70	90						
	4	x	25.80	70	95						
	5	x	32.00	75	100						
	6	x	36.20	75	115						
400	3	x	20.60	70	90						
	4	x	28.00	70	105						
	5	x	32.00	75	100						

▲ for profile C/22 ◆ for profile CX/X22 ■ for profile XPC

Number of grooves z	1	2	3	4	5	6
Face width b_2 [mm]	38	64	90	116	142	168

● Solid pulley
O Plate pulley (with or without holes)
× Spoked pulley
Hub position: flush one-sided
Material: EN-GJL-200 (GG 20) – DIN EN 1561

STANDARD RANGE
optibelt TB TAPER BUSHES

Taper bushes with metrical bore, groove according to DIN 6885 Part 1

Taper bush — Material: EN-GJL-200 – DIN EN 1561

	1008	1108	1210	1215	1310	1610	1615	2012	2517	3020	3030	3525	3535	4040	4545	5050
Bore diameter d_2 **[mm]**	10 11 12 14 16 18 19 20 22 24▲ 25▲	10 11 12 14 16 18 19 20 22 24 25 28▲	11 12 14 16 18 19 20 22 24 25 28 30 32	11 12 14 16 18 19 20 22 24 25 28 30 32	14 16 18 19 20 22 24 25 28 30 32 35	14 16 18 19 20 22 24 25 28 30 32 35 38 40 42▲	14 16 18 19 20 22 24 25 28 30 32 35 38 40 42▲	14 16 18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50	16 18 19 20 22 24 25 28 30 32 35 38 40 42 45 48 50 55 60	25 28 30 32 35 38 40 42 45 48 50 55 60 65 70 75	35 38 40 42 45 48 50 55 60 65 70 75	35 38 40 42 45 48 50 55 60 65 70 75 80 85 90	35 38 40 42 45 48 50 55 60 65 70 75 80 85 90	40 42 45 48 50 55 60 65 70 75 80 85 90 95 100	55 60 65 70 75 80 85 90 95 100 105 110	70 75 80 85 90 95 100 105 110 115 120 125
Hexagonal socket screw [inch]	$1/4 \times 1/2$	$1/4 \times 1/2$	$3/8 \times 5/8$	$3/8 \times 5/8$	$3/8 \times 5/8$	$3/8 \times 5/8$	$3/8 \times 5/8$	$7/16 \times 7/8$	$1/2 \times 1$	$5/8 \times 1\,1/4$	$5/8 \times 1\,1/4$	$1/2 \times 1\,1/2$	$1/2 \times 1\,1/2$	$5/8 \times 1\,3/4$	$3/4 \times 2$	$7/8 \times 2\,1/4$
Tightening torque [Nm]	5.7	5.7	20	20	20	20	20	31	49	92	92	115	115	172	195	275
Bush length [mm]	22.3	22.3	25.4	38.1	25.4	25.4	38.1	31.8	44.5	50.8	76.2	63.5	88.9	101.6	114.3	127.0
Weight for $d_{2\,min}$ [≈ kg]	0.12	0.16	0.28	0.39	0.32	0.41	0.60	0.75	1.06	2.50	3.75	3.90	5.13	7.68	12.70	15.17

From 3525: Cylinder head screw with hexagonal socket ▲ This is a shallow keyway bore.

Shallow keyways for taper bushes

Bore diameter d_2 [mm]	Groove width b [mm]	Groove depth t_2 [mm]	Bore diameter d_2 [mm]	Groove width b [mm]	Groove depth t_2 [mm]
24	8	2.0	28	8	2.0
25	8	1.3	42	12	2.2

Taper bushes with imperial bores, groove according to British Standard BS 46 Part 1

Taper bush — Material: EN-GJL-200 – DIN EN 1561

	1008	1108	1210	1215	1310	1610	1615	2012	2517	3020	3030	3525	3535	4040	4545	5050
Bore diameter d_2 **[inch]**	$3/8$* $1/2$ $5/8$ $3/4$ $7/8$ 1▲	$3/8$* $1/2$ $5/8$ $3/4$ $7/8$ 1 $1\,1/8$▲*	$1/2$ $5/8$ $3/4$ $7/8$ 1 $1\,1/8$ $1\,1/4$	$5/8$* $3/4$ $7/8$ 1 $1\,1/8$ $1\,1/4$	$1/2$* $5/8$* $3/4$* $7/8$* 1* $1\,1/8$ $1\,1/4$ $1\,3/8$	$1/2$ $5/8$ $3/4$ $7/8$ 1 $1\,1/8$ $1\,1/4$ $1\,3/8$ $1\,1/2$ $1\,5/8$	$1/2$ $5/8$ $3/4$ $7/8$* 1 $1\,1/8$ $1\,1/4$ $1\,3/8$ $1\,1/2$ $1\,5/8$▲*	$5/8$* $3/4$ $7/8$ 1 $1\,1/8$ $1\,1/4$ $1\,3/8$ $1\,1/2$ $1\,5/8$ $1\,3/4$ $1\,7/8$ 2	$3/4$ $7/8$ 1 $1\,1/8$ $1\,1/4$ $1\,3/8$ $1\,1/2$ $1\,5/8$ $1\,3/4$ $1\,7/8$ 2 $2\,1/8$ $2\,1/4$ $2\,3/8$ $2\,1/2$	$1\,1/4$ $1\,3/8$ $1\,1/2$ $1\,5/8$ $1\,3/4$* $1\,7/8$ 2 $2\,1/8$* $2\,1/4$ $2\,3/8$ $2\,1/2$ $2\,5/8$ 3 $3\,1/8$ $3\,1/4$	$1\,1/4$ $1\,3/8$ $1\,1/2$ $1\,5/8$ $1\,3/4$* $1\,7/8$ 2 $2\,1/8$* $2\,1/4$ $2\,3/8$ $2\,1/2$ $2\,5/8$* $2\,3/4$* $2\,7/8$ 3 $3\,1/8$ $3\,1/4$	$1\,1/2$ $1\,5/8$ $1\,3/4$ $1\,7/8$ 2 $2\,1/8$ $2\,1/4$ $2\,3/8$ $2\,1/2$ $2\,5/8$ $2\,3/4$ $2\,7/8$ 3 $3\,1/8$ $3\,1/4$ $3\,3/8$ $3\,1/2$▲	$1\,1/2$ $1\,5/8$ $1\,3/4$ $1\,7/8$ 2 $2\,1/8$ $2\,1/4$ $2\,3/8$ $2\,1/2$ $2\,5/8$ $2\,3/4$ $2\,7/8$ 3 $3\,1/8$ $3\,1/4$ $3\,3/8$ $3\,1/2$▲	$1\,3/4$* $1\,7/8$* 2* $2\,1/8$* $2\,1/4$* $2\,3/8$* $2\,1/2$* $2\,5/8$* $2\,3/4$* $2\,7/8$* 3* $3\,1/8$* $3\,1/4$* $3\,3/8$* $3\,1/2$* $3\,3/4$▲* 4▲*	$2\,1/4$* $2\,3/8$* $2\,1/2$* $2\,3/4$* $2\,7/8$* 3* $3\,1/4$* $3\,3/8$* $3\,1/2$* $3\,3/4$* 4* $4\,1/4$▲* $4\,1/2$▲*	3* $3\,1/4$* $3\,1/2$* $3\,3/4$* 4* $4\,1/4$* $4\,1/2$* $4\,3/4$* 5▲*
Hexagonal socket screw [inch]	$1/4 \times 1/2$	$1/4 \times 1/2$	$3/8 \times 5/8$	$3/8 \times 5/8$	$3/8 \times 5/8$	$3/8 \times 5/8$	$3/8 \times 5/8$	$7/16 \times 7/8$	$1/2 \times 1$	$5/8 \times 1\,1/4$	$5/8 \times 1\,1/4$	$1/2 \times 1\,1/2$	$1/2 \times 1\,1/2$	$5/8 \times 1\,3/4$	$3/4 \times 2$	$7/8 \times 2\,1/4$
Tightening torque [Nm]	5.7	5.7	20	20	20	20	20	31	49	92	92	115	115	172	195	275
Bush length [mm]	22.3	22.3	25.4	38.1	25.4	25.4	38.1	31.8	44.5	50.8	76.2	63.5	88.9	101.6	114.3	127.0
Weight for $d_{2\,min}$ [≈ kg]	0.12	0.16	0.28	0.39	0.32	0.41	0.60	0.75	1.06	2.50	3.75	3.90	5.13	7.68	12.70	15.17

From 3525: Cylinder head screw with hexagonal socket * Non stock items ▲ This is a shallow keyway bore.

